ABSTRACT OF THE DISCLOSURE

The present invention provides a surface treatment apparatus containing a sheet heating unit for heating a sheet, a sheet cooling unit for cooling the sheet. The apparatus satisfying at least one of following conditions:

- (1) the apparatus transfers a surface quality of the contact member to a surface of the image recording layer and an interface of the thermoplastic resin layer facing the image recording layer of the sheet;
- (2) the apparatus further contains the contact member selecting unit which selects the contact member having a desired surface quality;
- (3) the apparatus further comprises a treatment control unit which controls treatment conditions of at least one of the sheet heating unit and the sheet cooling unit; and
- (4) the sheet heating unit includes a sheet preheating part preheating the sheet and the apparatus transfers a surface quality of the contact member to the sheet heated by the sheet preheating part.